

Alaska Native Births and Infant Deaths 1980 - 1996



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Alaska Area Native Health Service
Division of Planning, Evaluation, and Health Statistics**

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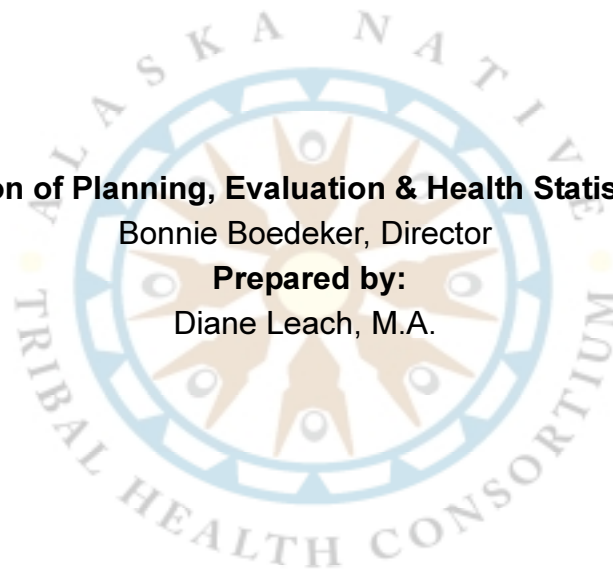
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INTRODUCTION

One of the principal sources of information about the changing patterns of the health status of Alaska Natives is natality and mortality statistics. This report represents a summary of trends (1980 through 1996) in the health status of Alaska Natives as indicated by their birth and infant death rates.

Source data on births and infant deaths was obtained from special natality and mortality reports prepared by the Indian Health Service. The most recent data year available is 1996.

TERMINOLOGY

The terms *death rate* and *mortality rate* and *birth rate* and *natality rate* are used interchangeably. Below are several terms and definitions which are quoted in this publication.

Birth Rate/Natality Rate. The number of live births per 1,000 total population (Table 3), or by 1,000 women in the age group (Table 4).

Infant Death/Infant Mortality Rate. The number of deaths under one year of age divided by the number of live births, expressed as deaths per 1,000 live births.

Neonatal Mortality Rate. The number of deaths in the first four weeks of life divided by the number of live births, expressed as deaths per 1,000 live births.

Post Neonatal Mortality Rate. The number of deaths to infants between the ages of four weeks and one year of life divided by the number of live births, expressed as deaths per 1,000 live births.

METHODOLOGY

In small populations, the number of births (or infant deaths) are frequently too small to be useful over time. Therefore, averages are often calculated over a specific time frame. Three-year moving averages have been tabulated. For example, the three-year rate for 1996 refers to the average of the years 1994, 1995, and 1996. The "moving average" methodology reduces the effect of year-to-year variations in categories where small numbers of births (or infant deaths) occur.

IHS publications apply an adjustment formula when preparing mortality statistics in order to adjust for misclassification of race on state death certificates. This publication does not adjust for death certificate misclassification since the deaths reported here are infants under the age of one and since the state of Alaska has less of a problem miscoding race on death certificates (less than 5.5%) than other states.

NOTES

The population counts used in determining the birth rates are Indian Health Service estimates based upon the 1980 and 1990 U.S. Censuses with the addition of births and subtraction of deaths.

In computing the Alaska statewide birth rates in Table 4, population counts were estimated by the Alaska Department of Labor by cohort group. The following *Population Overviews* published by the Alaska Department of Labor were used for this report: *1986 and Provisional 1987 Estimates*, *1988 and Provisional 1989 Estimates* and *1999 Estimates*. Annual population estimates, by age, race and sex, from 1980 to 1996 came from these three publications with the exception of 1989.

For 1989, Alaska population figures were published by age and sex, but not race. To estimate the 1989 Alaska Native population, the appropriate 1988 Alaska Native population percentages were applied to the 1989 Alaska female populations by age group. For example, 18.1% of 1988 Alaska's 14-17 year old population were Alaska Natives. The 18.1% figure was applied to the 1989 Alaska female population of 15, 16, and 17 year olds.

Service unit birth rates per 1,000 women in the age group are not published this year. Due to unknown migration factors between service units, populations

based on the 1990 Census (especially by age and sex) cannot be accurately estimated. The 2000 Census populations are not yet available.

Ten-year rates were used to compare infant mortality rates between service units since the number of deaths by service unit is so small. Infant mortality trends within the service unit over time are displayed in three-year average rates so that it is easier to see changes.

ADDITIONAL INFORMATION

Inquiries and correspondence regarding data from this and other reports published by the Alaska Native Tribal Health Consortium can be obtained by writing or visiting the:

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This and other reports available via website:
<http://www.alaska.ihs.gov/dpehs>

Table 1.
1996 Alaska Native Births and Infant Deaths

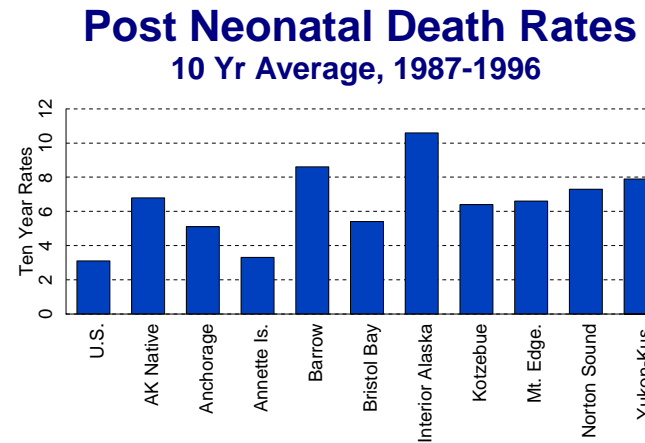
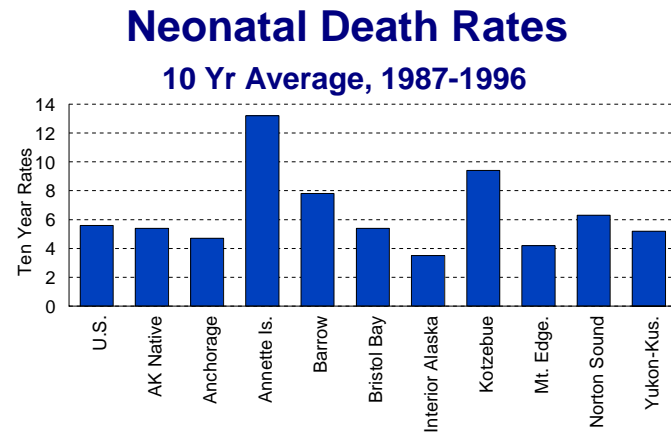
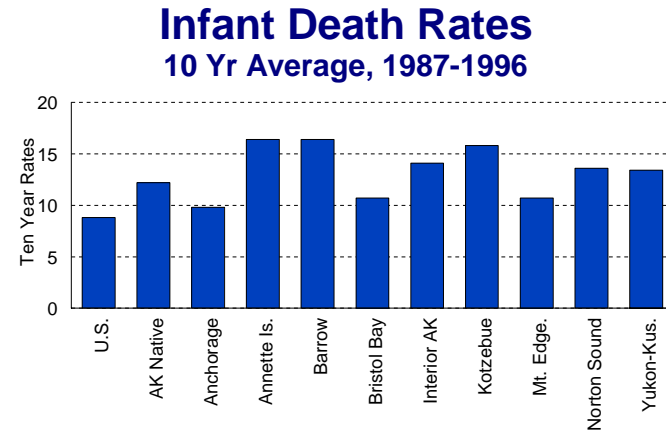
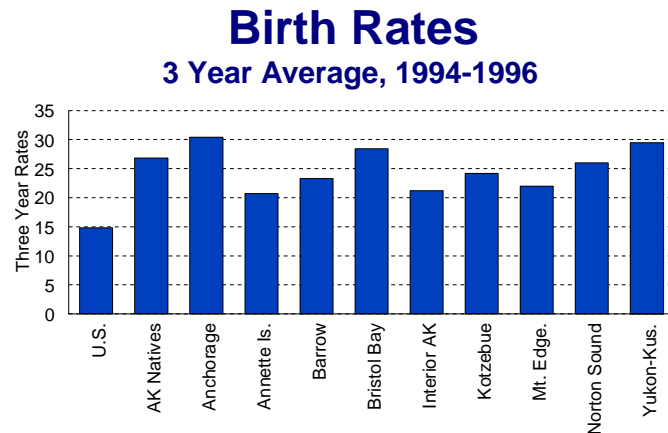
Service Area	BIRTHS			INFANT DEATHS			NEONATAL DEATHS			POST NEONATAL DEATHS		
	Number	3-Year Rate ¹	U.S. Rate ¹	Number	3-Year Rate ²	U.S. Rate ²	Number	3-Year Rate ²	U.S. Rate ²	Number	3-Year Rate ²	U.S. Rate ²
Anchorage	923	30.4		7	8.1		3	5.1		4	2.9	
Annette Island	24	20.7		0	24.1		0	24.1		0	0.0	
Barrow	103	23.3		1	14.3		0	3.6		1	10.8	
Bristol Bay	125	28.4		1	9.3		1	7.0		0	2.3	
Interior Alaska	249	21.2		2	11.4		2	7.1		0	4.3	
Kotzebue	177	24.2		3	12.6		2	4.2		1	8.4	
Mt. Edgecumbe	284	22.0		5	8.2		1	1.2		4	7.0	
Norton Sound	205	26.0		0	1.8		0	1.8		0	0.0	
Yukon-Kuskokwim Delta	599	29.5		5	9.7		1	4.6		4	5.2	
Alaska Natives	2,689	26.8	14.8	24	9.1	7.2	10	4.7	4.7	14	4.3	2.5

¹ Birth rates are rates per 1,000 total population. Alaska Native births are from IHS Natality Report NSU-01 dated December 8, 1998. The three-year average is the end year of the three-year period. United States birth rates are from the National Center for Health Statistics (NCHS) and are single year rates.

² Infant death rates are deaths per 1,000 live births. Alaska Native infant deaths are from IHS Reports MINFDTHS-01 and MINFDTHS-02 dated December 15, 1998. United States death rates are from the NCHS.

Chart 1.

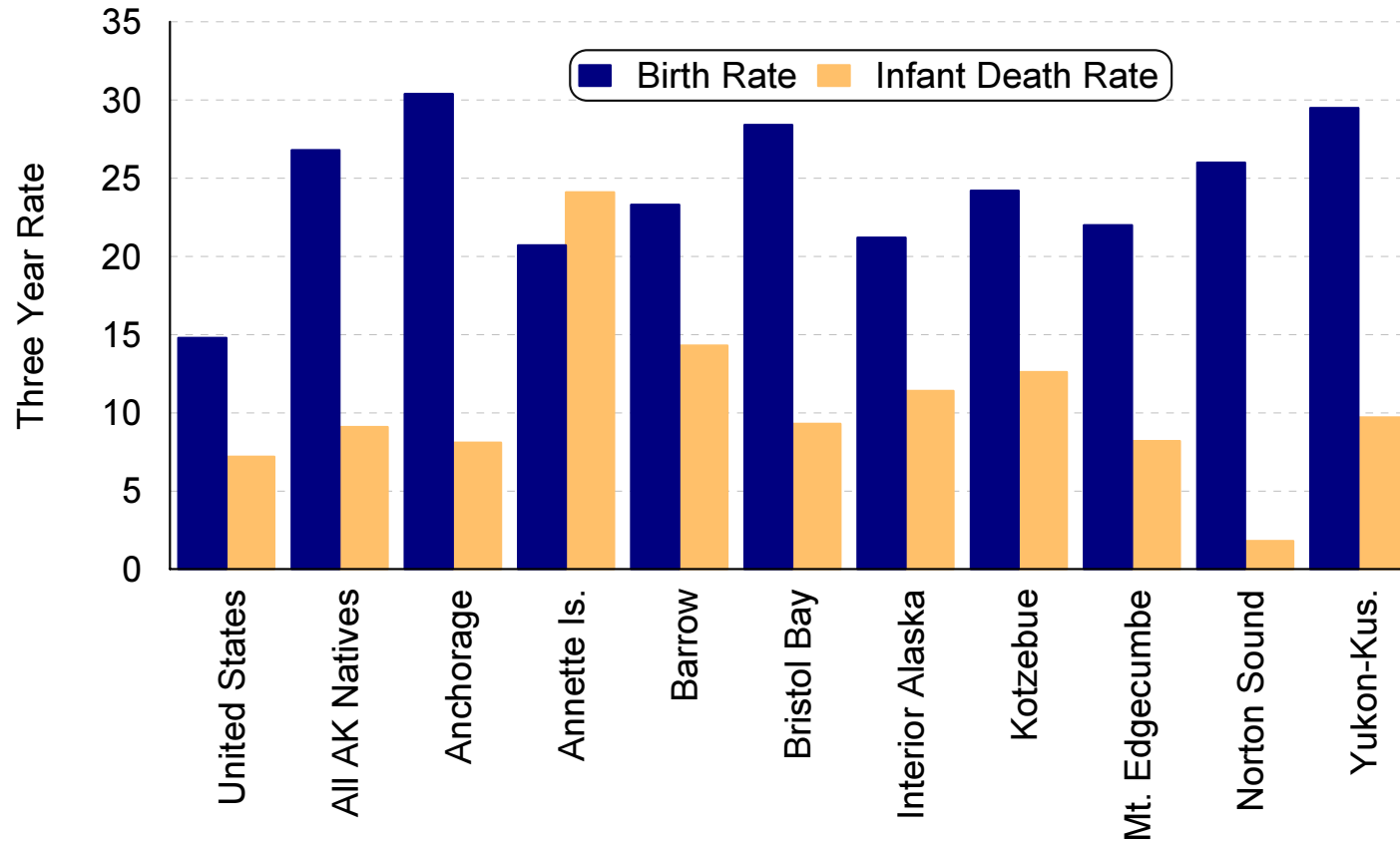
Alaska Native Birth and Infant Death Rates



Birth rates are rates per 1,000 total population. Alaska Native births are from IHS Natality Report NSU-01 dated December 8, 1998. The three-year average is the end year of the three-year period. United States birth rates are from the National Center for Health Statistics (NCHS) and are single year rates.

Infant death rates are deaths per 1,000 births and have been calculated as ten-year rates. Alaska Native infant deaths are from annual IHS Reports MINFDTHS-01 and MINFDTHS-02. United States death rates are from the NCHS.

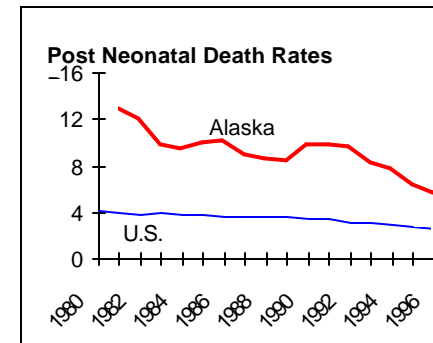
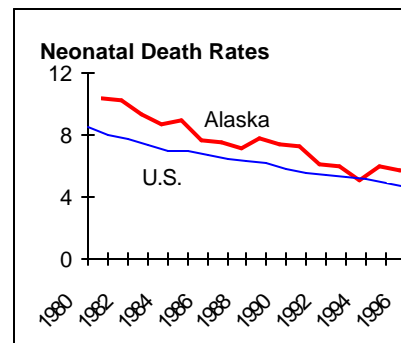
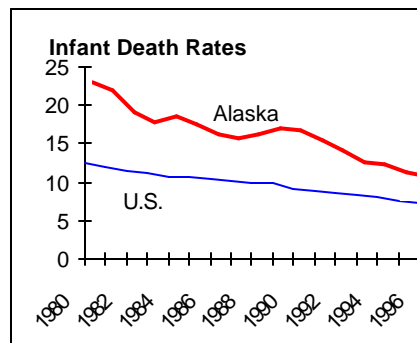
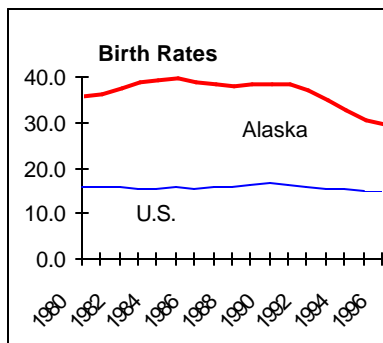
Chart 2.
1994-1996 Alaska Native
Birth and Infant Death Rates



Sources: Birth rates are rates per 1,000 total population. Alaska Native births are from IHS Natality Report NSU-01 dated December 8, 1998. The three-year average is the end year of the three-year period. United States birth rates are from the National Center for Health Statistics (NCHS) and are single year rates. Infant death rates are deaths per 1,000 live births. Alaska Native infant deaths are from IHS Reports MINFDTHS-01 and MINFDTHS-02 dated December 15, 1998. United States death rates are from the NCHS.

Table 3.
Alaska Native and U.S. Birth and Infant Death Rates, 1980 - 1996

BIRTHS					INFANT DEATHS				NEONATAL DEATHS				POST NEONATAL DEATHS			
Year	Number	1 yr Rate	3 Year Rate ¹	U.S. Rate	Number	1 yr Rate	3 Year Rate ²	U.S. Rate	Number	1 yr Rate	3 Year Rate ²	U.S. Rate	Number	1 yr Rate	3 Year Rate ²	U.S. Rate
1996	2689	27.0	26.8	14.8	24	8.9	9.1	7.2	10	3.7	4.7	4.7	14	5.2	4.3	2.5
1995	2582	26.4	27.5	14.8	21	8.1	9.6	7.6	13	5.0	4.9	4.9	8	3.1	4.7	2.7
1994	2569	26.9	29.7	15.2	26	10.1	10.6	8.0	14	5.4	5.2	5.1	12	4.7	5.4	2.9
1993	2736	29.3	32.3	15.5	29	10.6	10.9	8.4	12	4.4	4.2	5.3	17	6.2	6.7	3.1
1992	3016	33.1	34.5	16.0	33	10.9	12.4	8.5	17	5.6	5.1	5.4	16	5.3	7.3	3.1
1991	3055	34.5	35.4	16.3	34	11.1	13.9	8.9	8	2.6	5.3	5.6	26	8.5	8.6	3.4
1990	3099	35.9	35.6	16.7	47	15.2	15.1	9.2	22	7.1	6.5	5.8	25	8.1	8.7	3.4
1989	3022	36.0	35.6	16.4	47	15.6	15.3	9.8	19	6.3	6.6	6.2	28	9.3	8.7	3.6
1988	2867	35.0	35.3	16.0	42	14.6	14.5	10.0	17	5.9	7.0	6.3	25	8.7	7.5	3.6
1987	2855	35.9	35.8	15.7	45	15.8	14.0	10.1	22	7.7	6.4	6.5	23	8.1	7.6	3.6
1986	2708	35.0	35.8	15.6	35	12.9	14.6	10.4	20	7.4	6.7	6.7	15	5.5	7.9	3.6
1985	2750	36.6	36.8	15.8	36	13.1	16.0	10.6	11	4.0	6.8	7.0	25	9.1	9.2	3.7
1984	2629	36.0	36.6	15.6	47	17.9	17.0	10.8	23	8.7	8.1	7.0	24	9.1	8.9	3.8
1983	2682	37.9	35.9	15.6	46	17.2	16.3	11.2	21	7.8	7.9	7.3	25	9.3	8.4	3.9
1982	2461	35.9	34.6	15.9	39	15.8	17.4	11.5	19	7.7	8.6	7.7	20	8.1	8.9	3.8
1981	2230	33.6	33.5	15.8	35	15.7	20.4	11.9	18	8.1	9.4	8.0	17	7.6	11.0	3.9
1980	2195	34.2	32.9	15.9	46	21.0	21.4	12.6	22	10.0	9.6	8.5	24	10.9	11.8	4.1



¹ Birth rates are rates per 1,000 total population. Alaska Native births are from IHS Natality Report NSU-01 dated December 8, 1998. The three-year average is the end year of the three-year period. United States birth rates are from the National Center for Health Statistics (NCHS) and are single year rates.

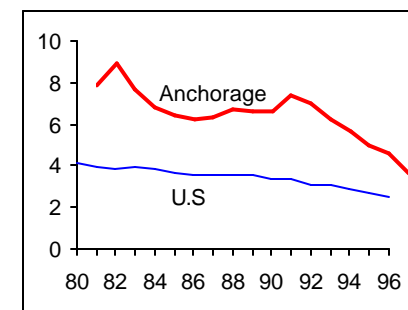
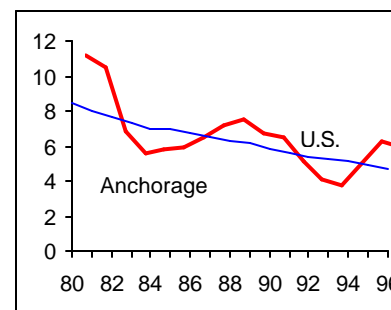
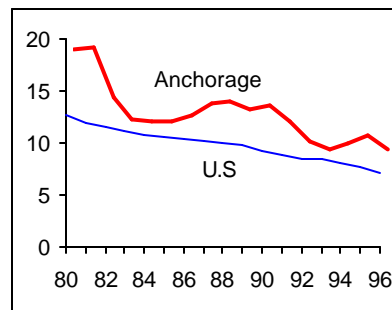
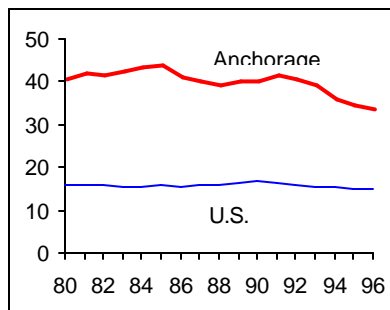
² Infant death rates are deaths per 1,000 live births. Alaska Native infant deaths are from IHS Reports MINFDTHS-01 and MINFDTHS-02 dated December 15, 1998. U. S. death rates are from the NCHS.

Table 3.

Alaska Native Birth and Infant Death Rates by Service Unit Compared to U.S. Rates, 1980 - 1996

ANCHORAGE SERVICE UNIT

BIRTHS					INFANT DEATHS				NEONATAL DEATHS				POST NEONATAL DEATHS			
Year	Number	1 yr Rate	3 Year Rate ¹	U.S. Rate	Number	1 yr Rate	3 Year Rate ²	U.S. Rate	Number	1 yr Rate	3 Year Rate ²	U.S. Rate	Number	1 yr Rate	3 Year Rate ²	U.S. Rate
96	923	30.1	30.4	14.8	7	7.6	8.1	7.2	3	3.3	5.1	4.7	4	4.3	2.9	2.5
95	951	31.8	31.5	14.8	7	7.4	9.4	7.6	5	5.3	5.4	4.9	2	2.1	4.0	2.7
94	853	29.2	32.8	15.2	8	9.4	8.6	8.0	6	7.0	4.3	5.1	2	2.3	4.3	2.9
93	957	33.6	36.0	15.5	11	11.5	8.0	8.4	4	4.2	3.0	5.3	7	7.3	5.0	3.1
92	990	35.7	37.5	15.9	5	5.1	8.9	8.5	2	2.0	3.3	5.4	3	3.0	5.6	3.1
91	1051	39.0	38.2	16.3	8	7.6	10.7	8.9	3	2.9	4.3	5.6	5	4.8	6.3	3.4
90	989	37.7	37.1	16.7	14	14.2	12.4	9.2	5	5.1	5.7	5.8	9	9.1	6.7	3.4
89	962	38.0	36.7	16.4	10	10.4	11.9	9.8	5	5.2	6.0	6.2	5	5.2	6.0	3.6
88	864	35.4	35.8	16.0	11	12.7	12.7	10.0	6	6.9	6.7	6.3	5	5.8	6.0	3.6
87	859	36.6	36.7	15.7	11	12.8	12.5	10.1	5	5.8	6.4	6.5	6	7.0	6.0	3.6
86	798	35.3	38.0	15.6	10	12.5	11.3	10.4	6	7.5	5.7	6.7	4	5.0	5.7	3.6
85	832	38.4	40.5	15.8	10	12.0	10.7	10.6	5	6.0	5.2	7.0	5	6.0	5.6	3.7
84	838	40.4	40.2	15.6	8	9.5	10.8	10.8	3	3.6	5.0	7.0	5	6.0	5.8	3.8
83	847	42.7	39.2	15.6	9	10.6	11.0	11.2	5	5.9	4.8	7.3	4	4.7	6.2	3.9
82	728	37.3	38.3	15.9	9	12.4	13.1	11.5	4	5.5	6.1	7.7	5	6.9	7.0	3.8
81	694	37.3	38.7	15.8	7	10.1	17.9	11.9	2	2.9	9.7	8.0	5	7.2	8.2	3.9
80	711	40.2	37.5	15.9	12	16.9	17.6	12.6	7	9.8	10.4	8.5	5	7.0	7.2	4.1



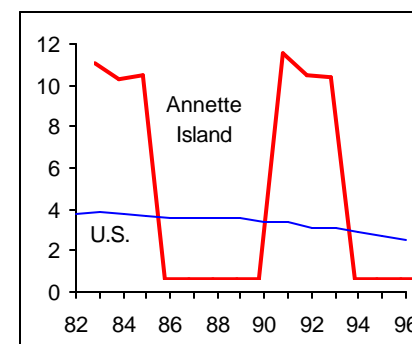
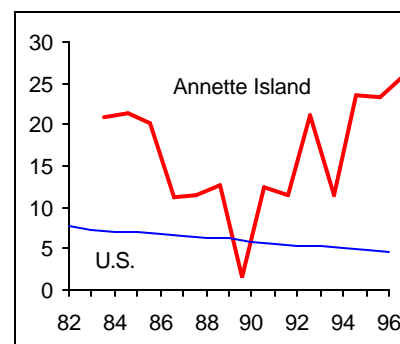
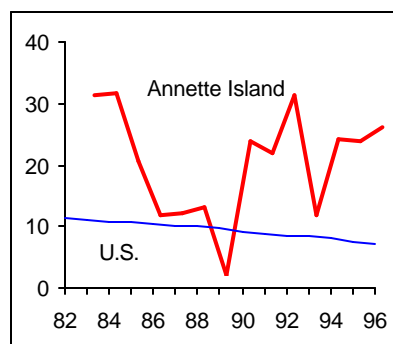
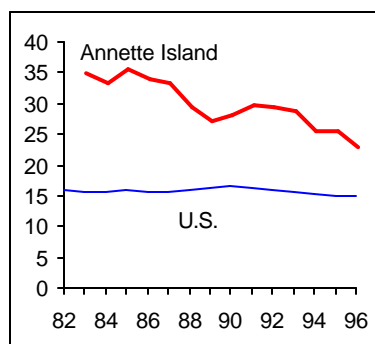
¹ Birth rates are rates per 1,000 total population. Alaska Native births are from IHS Natality Report NSU-01 dated December 8, 1998. The three-year average is the end year of the three-year period. United States birth rates are from the National Center for Health Statistics (NCHS) and are single year rates.

² Infant death rates are deaths per 1,000 live births. Alaska Native infant deaths are from IHS Reports MINFDTHS-01 and MINFDTHS-02 dated December 15, 1998. United States death rates are from the NCHS.

Table 3.
Alaska Native Birth and Infant Death Rates by Service Unit Compared to U.S. Rates, 1980 - 1996

ANNETTE ISLAND SERVICE UNIT

BIRTHS					INFANT DEATHS				NEONATAL DEATHS				POST NEONATAL DEATHS			
Year	Number	1 yr Rate	3 Year Rate ¹	U.S. Rate	Number	1 yr Rate	3 Year Rate ²	U.S. Rate	Number	1 yr Rate	3 Year Rate ²	U.S. Rate	Number	1 yr Rate	3 Year Rate ²	U.S. Rate
96	24	17.7	20.7	14.8	0	0.0	24.1	7.2	0	0.0	24.1	4.7	0	0.0	0.0	2.5
95	32	24.0	23.4	14.8	1	31.3	21.7	7.6	1	31.3	21.7	4.9	0	0.0	0.0	2.7
94	27	20.6	23.5	15.2	1	37.0	22.0	8.0	1	37.0	22.0	5.1	0	0.0	0.0	2.9
93	33	25.5	26.6	15.5	0	0.0	9.9	8.4	0	0.0	9.9	5.3	0	0.0	0.0	3.1
92	31	24.5	27.4	16.0	1	32.3	29.4	8.5	1	32.3	19.6	5.4	0	0.0	9.8	3.1
91	37	29.8	27.8	16.3	0	0.0	19.8	8.9	0	0.0	9.9	5.6	0	0.0	9.9	3.4
90	34	28.0	26.0	16.7	2	58.8	21.7	9.2	1	29.4	10.9	5.8	1	29.4	10.9	3.4
89	30	25.5	25.1	16.4	0	0.0	0.0	9.8	0	0.0	0.0	6.2	0	0.0	0.0	3.6
88	28	24.5	27.2	16.0	0	0.0	11.1	10.0	0	0.0	11.1	6.3	0	0.0	0.0	3.6
87	28	25.3	31.2	15.7	0	0.0	10.0	10.1	0	0.0	10.0	6.5	0	0.0	0.0	3.6
86	34	31.8	31.9	15.6	1	29.4	9.7	10.4	1	29.4	9.7	6.7	0	0.0	0.0	3.6
85	38	36.9	33.3	15.8	0	0.0	18.5	10.6	0	0.0	18.5	7.0	0	0.0	0.0	3.7
84	31	27.6	31.1	15.6	0	0.0	29.7	10.8	0	0.0	19.8	7.0	0	0.0	9.9	3.8
83	39	36.0	33.0	15.6	2	51.3	29.1	11.2	2	51.3	19.4	7.3	0	0.0	9.7	3.9
82	31	29.8		15.9	1	32.3		11.5	0	0.0		7.7	1	32.3	10.4	3.8



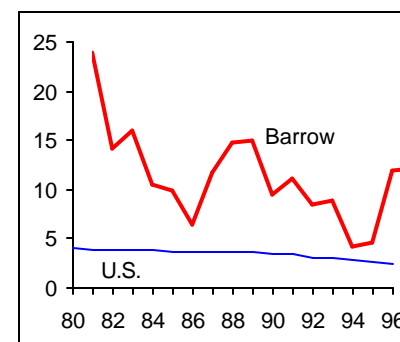
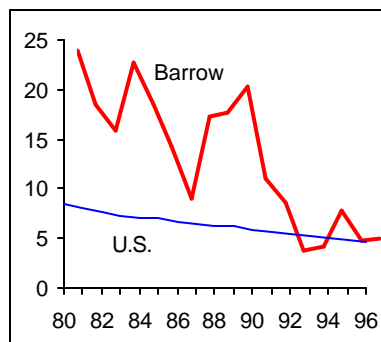
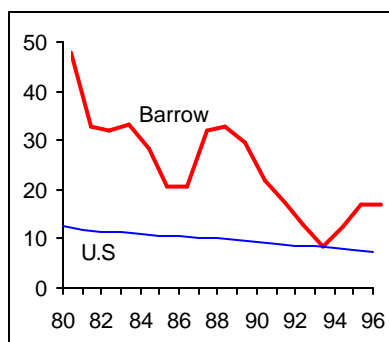
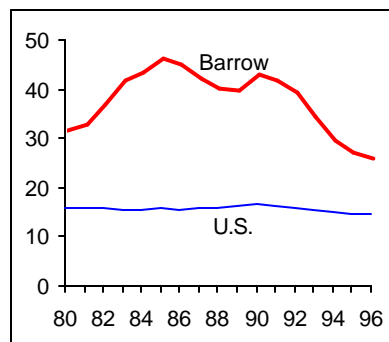
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Table 3.
Alaska Native Birth and Infant Death Rates by Service Unit Compared to U.S. Rates, 1980 - 1996

BARROW SERVICE UNIT

BIRTHS					INFANT DEATHS				NEONATAL DEATHS				POST NEONATAL DEATHS			
Year	Number	1 yr Rate	3 Year Rate ¹	U.S. Rate	Number	1 yr Rate	3 Year Rate ²	U.S. Rate	Number	1 yr Rate	3 Year Rate ²	U.S. Rate	Number	1 yr Rate	3 Year Rate ²	U.S. Rate
96	103	25.3	23.3	14.8	1	9.7	14.3	7.2	0	0.0	3.6	4.7	1	9.7	10.8	2.5
95	91	22.8	24.3	14.8	2	22.0	14.0	7.6	0	0.0	3.5	4.9	2	22.0	10.5	2.7
94	85	21.8	26.9	15.2	1	11.8	9.7	8.0	1	11.8	6.5	5.1	0	0.0	3.2	2.9
93	109	28.4	31.6	15.5	1	9.2	5.6	8.4	0	0.0	2.8	5.3	1	9.2	2.8	3.1
92	115	30.7	36.4	16.0	1	8.7	10.1	8.5	1	8.7	2.5	5.4	0	0.0	7.5	3.1
91	130	35.7	39.0	16.3	0	0.0	14.5	8.9	0	0.0	7.2	5.6	0	0.0	7.2	3.4
90	153	43.3	40.1	16.7	3	19.6	19.3	9.2	0	0.0	9.7	5.8	3	19.6	9.7	3.4
89	131	38.0	36.9	16.4	3	22.9	27.0	9.8	3	22.9	18.9	6.2	0	0.0	8.1	3.6
88	130	38.8	37.4	16.0	2	15.4	30.1	10.0	1	7.7	16.4	6.3	1	7.7	13.7	3.6
87	110	33.7	39.4	15.7	5	45.5	29.3	10.1	3	27.3	16.0	6.5	2	18.2	13.3	3.6
86	126	39.7	42.2	15.6	4	31.7	18.0	10.4	2	15.9	7.7	6.7	2	15.9	10.3	3.6
85	139	45.1	43.4	15.8	2	14.4	18.1	10.6	1	7.2	12.9	7.0	1	7.2	5.2	3.7
84	124	41.9	40.8	15.6	1	8.1	25.6	10.8	0	0.0	17.1	7.0	1	8.1	8.5	3.8
83	124	43.2	39.2	15.6	4	32.3	30.6	11.2	4	32.3	21.4	7.3	0	0.0	9.2	3.9
82	103	37.0	34.1	15.9	4	38.8	29.1	11.5	2	19.4	14.5	7.7	2	19.4	14.5	3.8
81	100	37.2	29.9	15.8	2	20.0	29.9	11.9	1	10.0	17.1	8.0	1	10.0	12.8	3.9
80	72	27.7	29.0	15.9	2	27.8	45.2	12.6	1	13.9	22.6	8.5	1	13.9	22.6	4.1



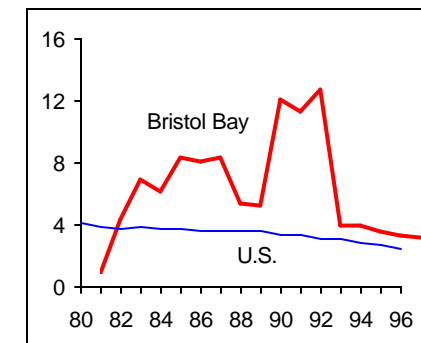
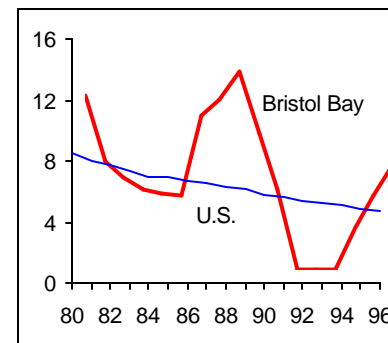
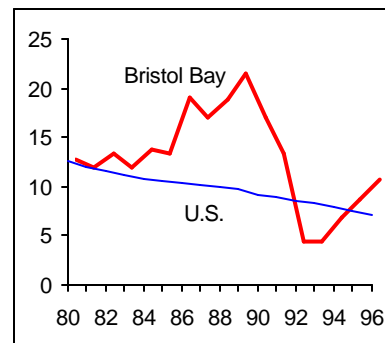
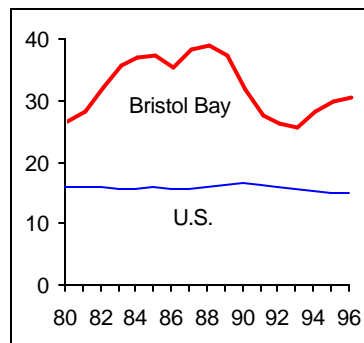
¹ Birth rates are rates per 1,000 total population. Alaska Native births are from IHS Natality Report NSU-01 dated December 8, 1998. The three-year average is the end year of the three-year period. United States birth rates are from the National Center for Health Statistics (NCHS) and are single year rates.

² Infant death rates are deaths per 1,000 live births. Alaska Native infant deaths are from IHS Reports MINFDTHS-01 and MINFDTHS-02 dated December 15, 1998. United States death rates are from the NCHS.

Table 3.
Alaska Native Birth and Infant Death Rates by Service Unit Compared to U.S. Rates, 1980 - 1996

BRISTOL BAY SERVICE UNIT

BIRTHS					INFANT DEATHS				NEONATAL DEATHS				POST NEONATAL DEATHS			
Year	Number	1 yr Rate	3 Year Rate ¹	U.S. Rate	Number	1 yr Rate	3 Year Rate ²	U.S. Rate	Number	1 yr Rate	3 Year Rate ²	U.S. Rate	Number	1 yr Rate	3 Year Rate ²	U.S. Rate
96	125	24.4	28.4	14.8	1	8.0	9.3	7.2	1	8.0	7.0	4.7	0	0.0	2.3	2.5
95	146	29.1	27.7	14.8	1	6.8	7.4	7.6	1	6.8	4.9	4.9	0	0.0	2.5	2.7
94	157	32.0	25.9	15.2	2	12.7	5.4	8.0	1	6.4	2.7	5.1	1	6.4	2.7	2.9
93	104	21.8	23.5	15.5	0	0.0	3.0	8.4	0	0.0	0.0	5.3	0	0.0	3.0	3.1
92	110	23.5	24.0	16.0	0	0.0	3.1	8.5	0	0.0	0.0	5.4	0	0.0	3.1	3.1
91	114	25.1	25.3	16.3	1	8.8	11.9	8.9	0	0.0	0.0	5.6	1	8.8	11.9	3.4
90	103	23.4	29.5	16.7	0	0.0	15.7	9.2	0	0.0	5.2	5.8	0	0.0	10.4	3.4
89	118	27.3	35.1	16.4	3	25.4	20.1	9.8	0	0.0	8.9	6.2	3	25.4	11.2	3.6
88	161	37.9	36.7	16.0	3	18.6	17.4	10.0	2	12.4	13.0	6.3	1	6.2	4.3	3.6
87	168	40.2	36.2	15.7	3	17.9	15.7	10.1	2	11.9	11.2	6.5	1	6.0	4.5	3.6
86	131	31.9	33.0	15.6	2	15.3	17.6	10.4	2	15.3	10.1	6.7	0	0.0	7.5	3.6
85	147	36.5	35.1	15.8	2	13.6	12.1	10.6	1	6.8	4.8	7.0	1	6.8	7.2	3.7
84	120	30.6	34.8	15.6	3	25.0	12.4	10.8	1	8.3	5.0	7.0	2	16.7	7.5	3.8
83	147	38.2	33.4	15.6	0	0.0	10.6	11.2	0	0.0	5.3	7.3	0	0.0	5.3	3.9
82	135	35.8	30.0	15.9	2	14.8	12.0	11.5	1	7.4	6.0	7.7	1	7.4	6.0	3.8
81	96	26.0	26.1	15.8	2	20.8	10.5	11.9	1	10.4	7.0	8.0	1	10.4	3.5	3.9
80	102	28.2	24.4	15.9	0	0.0	11.5	12.6	0	0.0	11.5	8.5	0	0.0	0.0	4.1



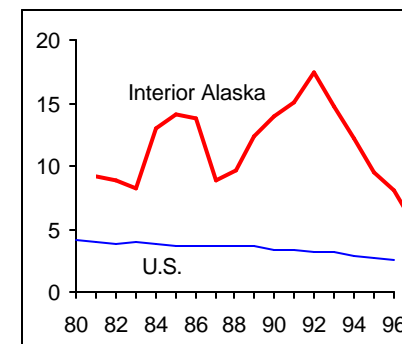
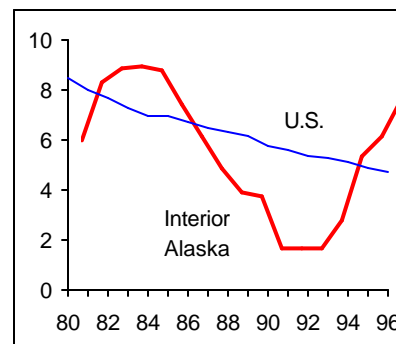
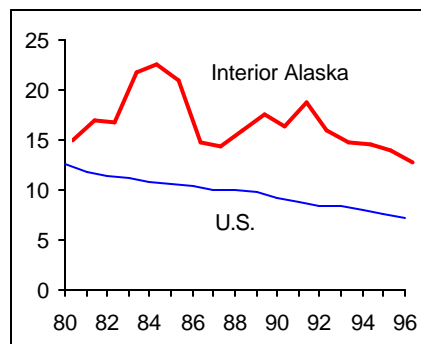
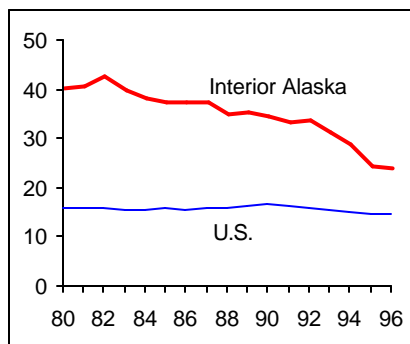
¹ Birth rates are rates per 1,000 total population. Alaska Native births are from IHS Natality Report NSU-01 dated December 8, 1998. The three-year average is the end year of the three-year period. United States birth rates are from the National Center for Health Statistics (NCHS) and are single year rates.

² Infant death rates are deaths per 1,000 live births. Alaska Native infant deaths are from IHS Reports MINFDTHS-01 and MINFDTHS-02 dated December 15, 1998. United States death rates are from the NCHS.

Table 3.
Alaska Native Birth and Infant Death Rates by Service Unit Compared to U.S. Rates, 1980 -1996

INTERIOR ALASKA SERVICE UNIT

BIRTHS					INFANT DEATHS				NEONATAL DEATHS				POST NEONATAL DEATHS			
Year	Number	1 yr Rate	3 Year Rate ¹	U.S. Rate	Number	1 yr Rate	3 Year Rate ²	U.S. Rate	Number	1 yr Rate	3 Year Rate ²	U.S. Rate	Number	1 yr Rate	3 Year Rate ²	U.S. Rate
96	249	22.1	21.2	14.8	2	8.0	11.4	7.2	2	8.0	7.1	4.7	0	0.0	4.3	2.5
95	234	21.1	21.7	14.8	2	8.5	12.6	7.6	1	4.3	5.6	4.9	1	4.3	7.0	2.7
94	221	20.3	26.1	15.2	4	18.1	13.1	8.0	2	9.0	4.8	5.1	2	9.0	8.3	2.9
93	257	23.9	28.4	15.5	3	11.7	13.4	8.4	1	3.9	2.2	5.3	2	7.8	11.1	3.1
92	361	34.2	30.8	16.0	4	11.1	14.7	8.5	1	2.8	1.1	5.4	3	8.3	13.7	3.1
91	279	27.1	30.4	16.3	5	17.9	17.4	8.9	0	0.0	1.1	5.6	5	17.9	16.4	3.4
90	311	30.9	31.8	16.7	5	16.1	15.0	9.2	0	0.0	1.1	5.8	5	16.1	13.9	3.4
89	327	33.4	32.6	16.4	6	18.3	16.2	9.8	1	3.1	3.2	6.2	5	15.3	12.9	3.6
88	294	31.0	32.3	16.0	3	10.2	14.6	10.0	0	0.0	3.4	6.3	3	10.2	11.2	3.6
87	307	33.3	34.6	15.7	6	19.5	12.9	10.1	2	6.5	4.3	6.5	4	13.0	8.6	3.6
86	291	32.6	34.4	15.6	4	13.7	13.4	10.4	1	3.4	5.6	6.7	3	10.3	7.8	3.6
85	330	38.1	34.4	15.8	2	6.1	19.5	10.6	1	3.0	6.9	7.0	1	3.0	12.6	3.7
84	275	32.4	35.4	15.6	6	21.8	21.2	10.8	3	10.9	8.2	7.0	3	10.9	13.0	3.8
83	266	32.4	37.0	15.6	9	33.8	20.4	11.2	2	7.5	8.4	7.3	7	26.3	12.0	3.9
82	308	42.1	39.7	15.9	3	9.7	15.5	11.5	2	6.5	8.3	7.7	1	3.2	7.2	3.8
81	261	37.1	37.9	15.8	5	19.2	15.5	11.9	3	11.5	7.8	8.0	2	7.7	7.8	3.9
80	270	39.9	37.3	15.9	5	18.5	13.5	12.6	2	7.4	5.4	8.5	3	11.1	8.1	4.1



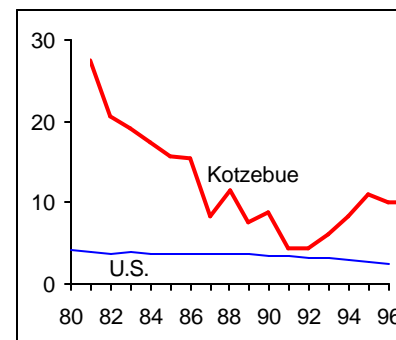
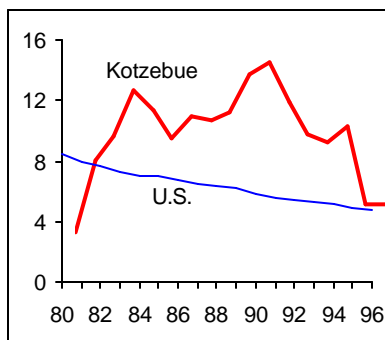
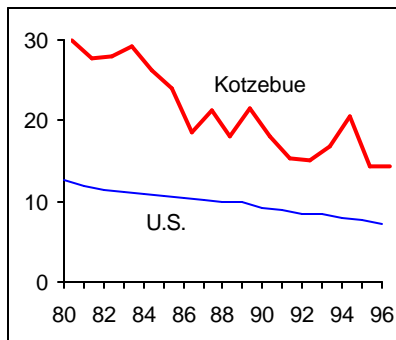
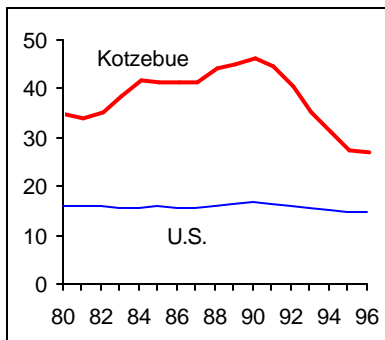
¹ Birth rates are rates per 1,000 total population. Alaska Native births are from IHS Natality Report NSU-01 dated December 8, 1998. The three-year average is the end year of the three-year period. United States birth rates are from the National Center for Health Statistics (NCHS) and are single year rates.

² Infant death rates are deaths per 1,000 live births. Alaska Native infant deaths are from IHS Reports MINFDTHS-01 and MINFDTHS-02 dated December 15, 1998. United States death rates are from the NCHS.

Table 3.
Alaska Native Birth and Infant Death Rates by Service Unit Compared to U.S. Rates, 1980 - 1996

KOTZEBUE SERVICE UNIT

BIRTHS					INFANT DEATHS				NEONATAL DEATHS				POST NEONATAL DEATHS			
Year	Number	1 yr Rate	3 Year Rate ¹	U.S. Rate	Number	1 yr Rate	3 Year Rate ²	U.S. Rate	Number	1 yr Rate	3 Year Rate ²	U.S. Rate	Number	1 yr Rate	3 Year Rate ²	U.S. Rate
96	177	26.5	24.2	14.8	3	16.9	12.6	7.2	2	11.3	4.2	4.7	1	5.6	8.4	2.5
95	130	19.7	24.5	14.8	1	7.7	12.6	7.6	0	0.0	4.2	4.9	1	7.7	8.4	2.7
94	171	26.5	28.3	15.2	2	11.7	18.7	8.0	0	0.0	9.4	5.1	2	11.7	9.4	2.9
93	174	27.6	32.3	15.5	3	17.2	15.1	8.4	2	11.5	8.4	5.3	1	5.7	6.7	3.1
92	189	31.0	37.7	16.0	5	26.5	13.4	8.5	3	15.9	8.9	5.4	2	10.6	4.5	3.1
91	233	39.1	41.8	16.3	1	4.3	13.7	8.9	0	0.0	11.0	5.6	1	4.3	2.7	3.4
90	251	43.3	43.3	16.7	3	12.0	16.3	9.2	3	12.0	13.6	5.8	0	0.0	2.7	3.4
89	244	43.0	42.3	16.4	6	24.6	19.9	9.8	5	20.5	12.8	6.2	1	4.1	7.1	3.6
88	242	43.6	41.5	16.0	3	12.4	16.3	10.0	2	8.3	10.4	6.3	1	4.1	5.9	3.6
87	219	40.4	38.5	15.7	5	22.8	19.6	10.1	2	9.1	9.8	6.5	3	13.7	9.8	3.6
86	214	40.4	38.4	15.6	3	14.0	16.8	10.4	3	14.0	10.1	6.7	0	0.0	6.7	3.6
85	179	34.6	38.5	15.8	4	22.3	22.3	10.6	1	5.6	8.6	7.0	3	16.8	13.7	3.7
84	203	40.2	38.8	15.6	3	14.8	24.4	10.8	2	9.9	10.5	7.0	1	4.9	14.0	3.8
83	201	40.8	35.5	15.6	6	29.9	27.4	11.2	2	10.0	11.7	7.3	4	19.9	15.7	3.9
82	169	35.2	32.5	15.9	5	29.6	26.3	11.5	2	11.8	8.8	7.7	3	17.8	17.5	3.8
81	141	30.2	31.0	15.8	3	21.3	26.0	11.9	2	14.2	7.1	8.0	1	7.1	18.9	3.9
80	146	32.1	32.0	15.9	4	27.4	28.2	12.6	0	0.0	2.3	8.5	4	27.4	25.8	4.1



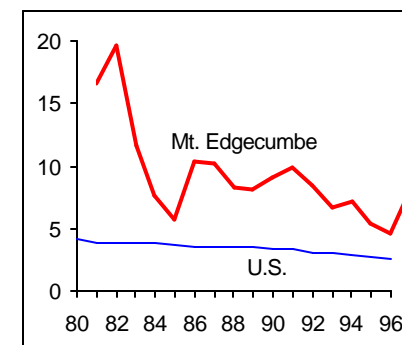
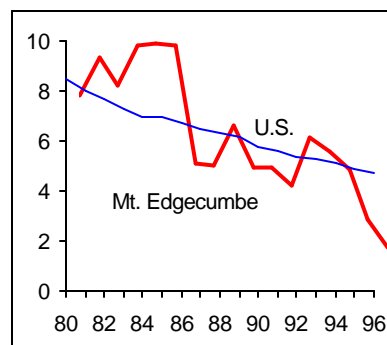
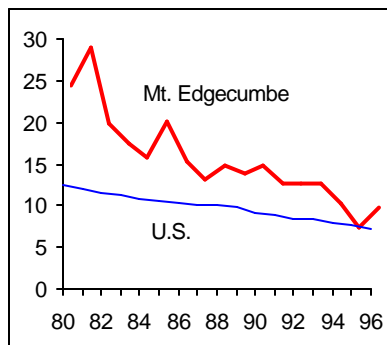
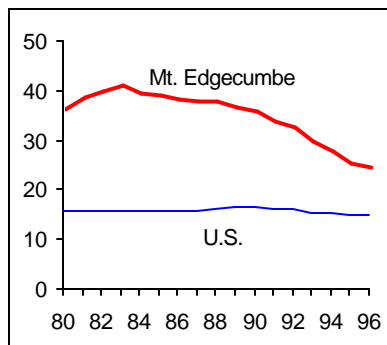
¹ Birth rates are rates per 1,000 total population. Alaska Native births are from IHS Natality Report NSU-01 dated December 8, 1998. The three-year average is the end year of the three-year period. United States birth rates are from the National Center for Health Statistics (NCHS) and are single year rates.

² Infant death rates are deaths per 1,000 live births. Alaska Native infant deaths are from IHS Reports MINFDTHS-01 and MINFDTHS-02 dated December 15, 1998. United States death rates are from the NCHS.

Table 3.
Alaska Native Birth and Infant Death Rates by Service Unit Compared to U.S. Rates, 1980 - 1996

MT. EDGECUMBE SERVICE UNIT

BIRTHS					INFANT DEATHS				NEONATAL DEATHS				POST NEONATAL DEATHS			
Year	Number	1 yr Rate	3 Year Rate ¹	U.S. Rate	Number	1 yr Rate	3 Year Rate ²	U.S. Rate	Number	1 yr Rate	3 Year Rate ²	U.S. Rate	Number	1 yr Rate	3 Year Rate ²	U.S. Rate
96	284	21.5	22.0	14.8	5	17.6	8.2	7.2	1	3.5	1.2	4.7	4	14.1	7.0	2.5
95	279	21.5	22.4	14.8	0	0.0	5.8	7.6	0	0.0	2.3	4.9	0	0.0	3.5	2.7
94	292	22.9	24.8	15.2	2	6.8	8.6	8.0	0	0.0	4.3	5.1	2	6.8	4.3	2.9
93	287	22.9	27.0	15.5	3	10.5	11.1	8.4	2	7.0	5.0	5.3	1	3.5	6.0	3.1
92	352	28.6	29.9	16.0	3	8.5	11.1	8.5	2	5.7	5.6	5.4	1	2.8	5.6	3.1
91	353	29.4	31.0	16.3	5	14.2	11.0	8.9	1	2.8	3.7	5.6	4	11.3	7.3	3.4
90	373	31.8	33.1	16.7	4	10.7	13.2	9.2	3	8.0	4.4	5.8	1	2.7	8.8	3.4
89	364	31.8	33.9	16.4	3	8.2	12.3	9.8	0	0.0	4.4	6.2	3	8.2	7.9	3.6
88	398	35.6	35.0	16.0	8	20.1	13.1	10.0	2	5.0	6.1	6.3	6	15.1	7.0	3.6
87	373	34.3	35.3	15.7	3	8.0	11.6	10.1	3	8.0	4.5	6.5	0	0.0	7.1	3.6
86	373	35.2	35.4	15.6	4	10.7	13.7	10.4	2	5.4	4.6	6.7	2	5.4	9.2	3.6
85	376	36.4	36.2	15.8	6	16.0	18.5	10.6	0	0.0	9.3	7.0	6	16.0	9.3	3.7
84	343	34.6	36.9	15.6	5	14.6	14.1	10.8	3	8.7	9.4	7.0	2	5.8	4.7	3.8
83	362	37.5	38.3	15.6	9	24.9	15.8	11.2	7	19.3	9.3	7.3	2	5.5	6.5	3.9
82	362	38.6	37.0	15.9	1	2.8	18.2	11.5	0	0.0	7.6	7.7	1	2.8	10.5	3.8
81	352	38.7	35.9	15.8	7	19.9	27.5	11.9	3	8.5	8.8	8.0	4	11.4	18.6	3.9
80	332	33.9	33.7	15.9	11	33.1	22.8	12.6	5	15.1	7.3	8.5	6	18.1	15.5	4.1



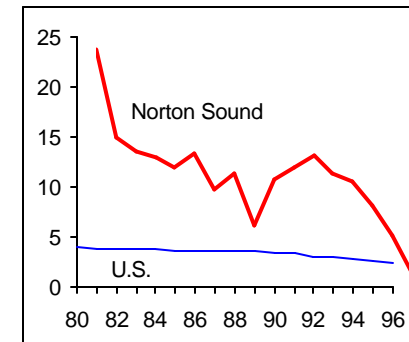
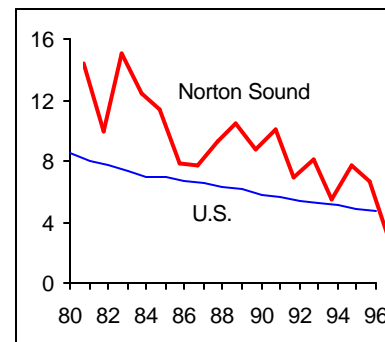
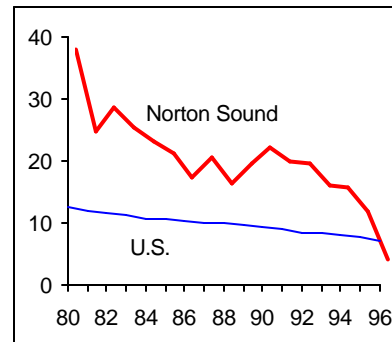
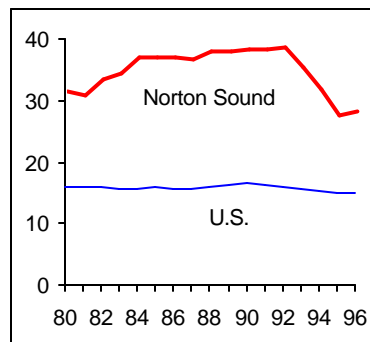
¹ Birth rates are rates per 1,000 total population. Alaska Native births are from IHS Natality Report NSU-01 dated December 8, 1998. The three-year average is the end year of the three-year period. United States birth rates are from the National Center for Health Statistics (NCHS) and are single year rates.

² Infant death rates are deaths per 1,000 live births. Alaska Native infant deaths are from IHS Reports MINFDTHS-01 and MINFDTHS-02 dated December 15, 1998. United States death rates are from the NCHS.

Table 3.
Alaska Native Birth and Infant Death Rates by Service Unit Compared to U.S. Rates, 1980 - 1996

NORTON SOUND SERVICE UNIT

BIRTHS					INFANT DEATHS				NEONATAL DEATHS				POST NEONATAL DEATHS			
Year	Number	1 yr Rate	3 Year Rate ¹	U.S. Rate	Number	1 yr Rate	3 Year Rate ²	U.S. Rate	Number	1 yr Rate	3 Year Rate ²	U.S. Rate	Number	1 yr Rate	3 Year Rate ²	U.S. Rate
96	205	29.0	26.0	14.8	0	0.0	1.8	7.2	0	0.0	1.8	4.7	0	0.0	0.0	2.5
95	164	23.6	25.4	14.8	0	0.0	9.7	7.6	0	0.0	5.8	4.9	0	0.0	3.9	2.7
94	172	25.4	29.6	15.2	1	5.8	13.6	8.0	1	5.8	6.8	5.1	0	0.0	6.8	2.9
93	181	27.2	33.2	15.5	4	22.1	13.9	8.4	2	11.0	4.6	5.3	2	11.0	9.3	3.1
92	236	36.3	36.5	16.0	3	12.7	17.3	8.5	1	4.2	7.2	5.4	2	8.5	10.1	3.1
91	230	36.3	36.1	16.3	2	8.7	17.9	8.9	0	0.0	6.0	5.6	2	8.9	11.9	3.4
90	228	37.0	36.0	16.7	7	30.7	19.9	9.2	4	17.5	9.2	5.8	3	13.2	10.7	3.4
89	212	35.0	35.6	16.4	3	14.2	17.3	9.8	0	0.0	7.8	6.2	3	14.2	9.4	3.6
88	214	35.9	35.7	16.0	3	14.0	14.3	10.0	2	9.3	9.6	6.3	1	4.7	4.8	3.6
87	211	36.0	34.6	15.7	5	23.7	18.4	10.1	3	14.2	8.4	6.5	2	9.5	10.0	3.6
86	203	35.2	34.6	15.6	1	4.9	15.3	10.4	1	4.9	6.8	6.7	0	0.0	8.5	3.6
85	184	32.5	34.7	15.8	5	27.2	19.0	10.6	1	5.4	6.9	7.0	4	21.7	12.1	3.7
84	202	36.3	34.8	15.6	3	14.9	21.0	10.8	2	9.9	10.5	7.0	1	5.0	10.5	3.8
83	193	35.3	32.1	15.6	3	15.5	23.2	11.2	1	5.2	11.6	7.3	2	10.4	11.6	3.9
82	176	32.8	31.2	15.9	6	34.1	26.3	11.5	3	17.0	14.2	7.7	3	17.0	12.1	3.8
81	148	28.1	28.5	15.8	3	20.3	22.6	11.9	2	13.5	9.0	8.0	1	6.8	13.6	3.9
80	170	32.9	29.3	15.9	4	23.5	36.0	12.6	2	11.8	13.5	8.5	2	11.8	22.5	4.1



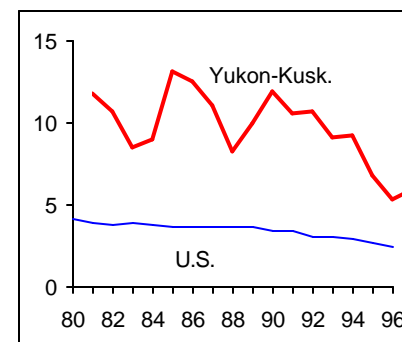
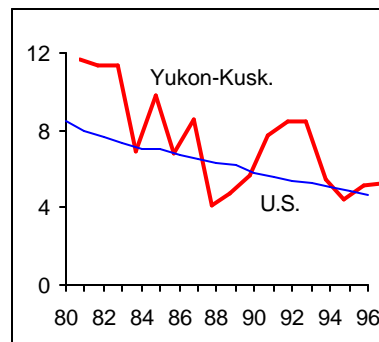
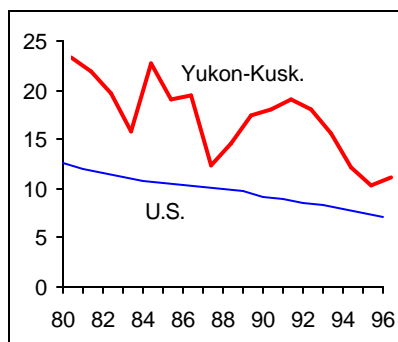
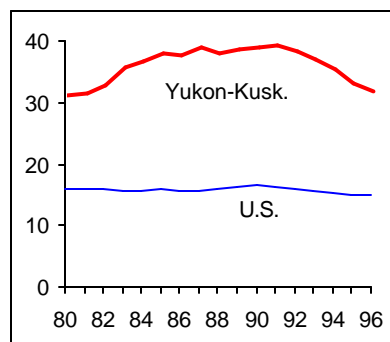
¹ Birth rates are rates per 1,000 total population. Alaska Native births are from IHS Natality Report NSU-01 dated December 8, 1998. The three-year average is the end year of the three-year period. United States birth rates are from the National Center for Health Statistics (NCHS) and are single year rates.

² Infant death rates are deaths per 1,000 live births. Alaska Native infant deaths are from IHS Reports MINFDTHS-01 and MINFDTHS-02 dated December 15, 1998. United States death rates are from the NCHS.

Table 3.
Alaska Native Birth and Infant Death Rates by Service Unit Compared to U.S. Rates, 1980 - 1996

YUKON-KUSKOKWIM SERVICE UNIT

BIRTHS					INFANT DEATHS				NEONATAL DEATHS				POST NEONATAL DEATHS			
Year	Number	1 yr Rate	3 Year Rate ¹	U.S. Rate	Number	1 yr Rate	3 Year Rate ²	U.S. Rate	Number	1 yr Rate	3 Year Rate ²	U.S. Rate	Number	1 yr Rate	3 Year Rate ²	U.S. Rate
96	599	29.7	29.5	14.8	5	8.3	9.7	7.2	1	1.7	4.6	4.7	4	6.7	5.2	2.5
95	555	28.1	30.8	14.8	7	12.6	9.0	7.6	5	9.0	4.5	4.9	2	3.6	4.5	2.7
94	591	30.7	33.1	15.2	5	8.5	10.8	8.0	2	3.4	3.8	5.1	3	5.1	5.9	2.9
93	634	33.8	34.7	15.5	4	6.3	14.3	8.4	1	1.6	4.8	5.3	3	4.7	8.4	3.1
92	632	34.7	36.1	16.0	11	17.4	16.7	8.5	4	6.4	7.8	5.4	5	7.9	8.3	3.1
91	628	35.5	37.1	16.3	12	19.1	17.7	8.9	4	6.4	7.8	5.6	8	12.7	9.9	3.4
90	657	38.3	36.7	16.7	9	13.7	16.7	9.2	6	9.1	7.0	5.8	3	4.6	9.7	3.4
89	634	37.6	36.4	16.4	13	20.5	16.1	9.8	5	7.9	5.0	6.2	8	12.6	11.1	3.6
88	564	34.1	35.9	16.0	9	16.0	13.2	10.0	2	3.5	4.0	6.3	7	12.4	9.2	3.6
87	608	37.5	36.6	15.7	7	11.5	10.9	10.1	2	3.3	3.4	6.5	5	8.2	7.4	3.6
86	572	36.0	35.6	15.6	7	12.2	18.1	10.4	3	5.2	7.8	6.7	4	7.0	10.2	3.6
85	565	36.3	35.7	15.8	5	8.8	17.8	10.6	1	1.8	6.1	7.0	4	7.1	11.6	3.7
84	524	34.4	34.6	15.6	18	34.4	21.3	10.8	9	17.2	9.1	7.0	9	17.2	12.3	3.8
83	542	36.3	33.4	15.6	6	11.1	14.4	11.2	0	0.0	6.2	7.3	6	11.1	8.2	3.9
82	480	32.9	30.6	15.9	9	18.8	18.3	11.5	5	10.4	10.7	7.7	4	8.3	7.6	3.8
81	438	30.7	29.2	15.8	6	13.7	20.5	11.9	4	9.1	10.6	8.0	2	4.6	9.8	3.9
80	392	28.1	28.9	15.9	9	23.0	22.0	12.6	5	12.8	11.0	8.5	4	10.2	11.0	4.1



¹ Birth rates are rates per 1,000 total population. Alaska Native births are from IHS Natality Report NSU-01 dated December 8, 1998. The three-year average is the end year of the three-year period. United States birth rates are from the National Center for Health Statistics (NCHS) and are single year rates.

² Infant death rates are deaths per 1,000 live births. Alaska Native infant deaths are from IHS Reports MINFDTHS-01 and MINFDTHS-02 dated December 15, 1998. United States death rates are from the NCHS.

Chart 3.
Alaska Native Birth Rates
per 1,000 Women in Age Group

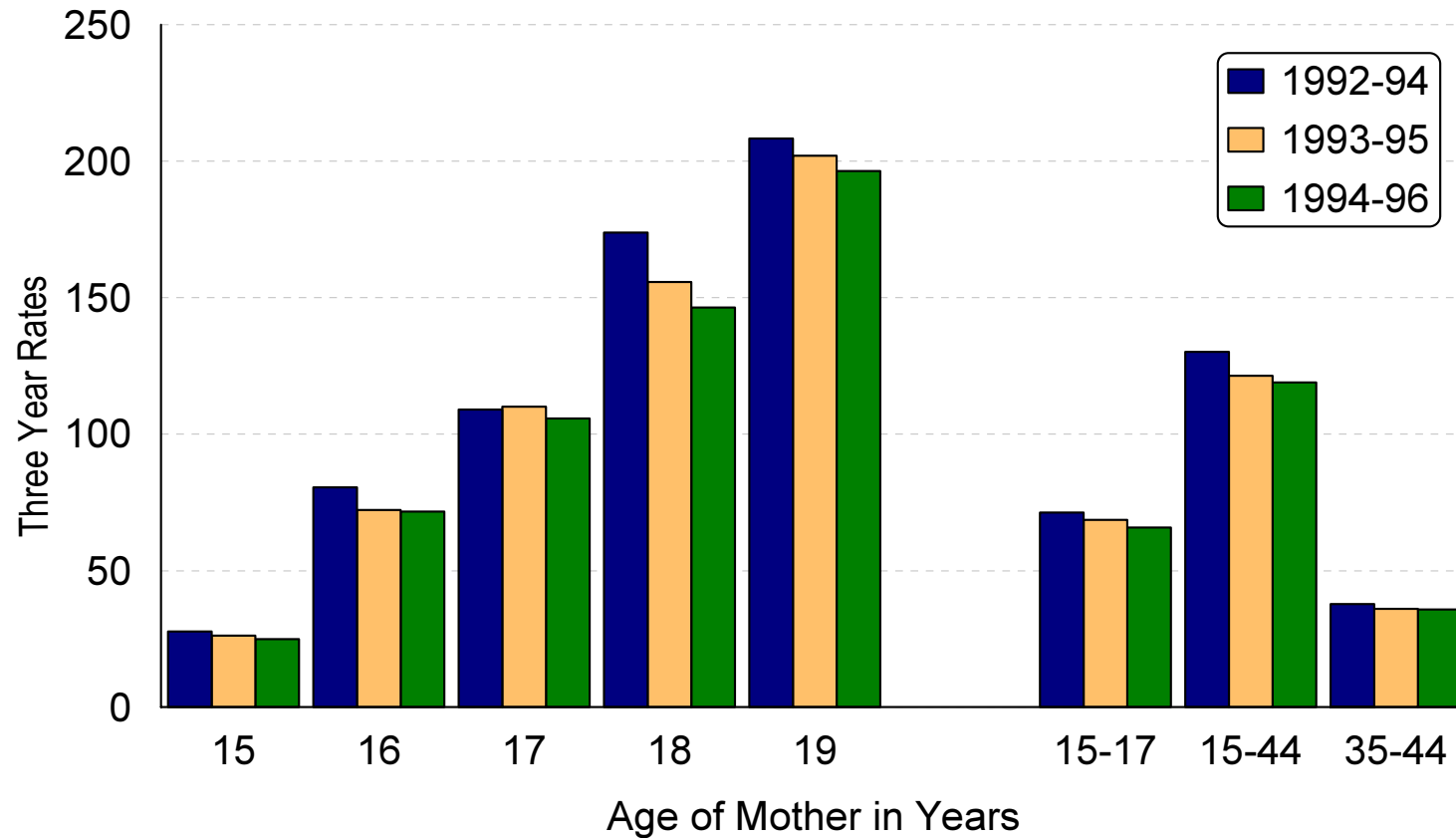


Table 4.
Alaskawide Native Birth Rates per 1,000 Women in Age Group
Three Year Moving Averages

Age	1980-82	1981-83	1982-84	1983-85	1984-86	1985-87	1986-88	1987-89
15	21.1	22.5	24.4	25.4	27.1	30.0	32.5	32.1
16	54.3	59.9	65.2	63.6	59.7	64.3	69.8	72.3
17	88.6	93.3	101.7	108.1	106.0	107.2	111.4	124.4
18	142.3	140.6	152.5	163.2	168.7	169.9	164.3	170.8
19	208.7	196.5	201.4	198.9	197.2	194.5	199.4	210.0
15-17	55.3	59.8	65.4	66.8	64.3	67.2	71.8	77.3
15-44	138.7	141.3	145.6	147.6	146.5	147.5	146.8	151.3
35-44	32.7	34.5	38.5	40.4	41.4	42.5	43.0	45.8

Age	1988-90	1989-91	1990-92	1991-93	1992-94	1993-95	1994-96
15	28.9	31.8	30.2	33.6	27.7	28.2	24.9
16	66.4	66.6	74.1	81.7	80.5	72.2	71.7
17	118.6	117.8	111.8	113.8	109.0	110.1	105.7
18	178.5	183.4	183.9	177.2	173.8	155.7	146.4
19	225.3	236.2	236.5	217.9	208.3	202.0	196.4
15-17	71.6	71.8	71.4	75.6	71.3	68.6	65.8
15-44	149.4	155.1	148.3	139.9	130.1	121.4	118.9
35-44	47.7	49.7	46.1	42.6	37.8	36.0	35.8

The rates for this table were computed using State of Alaska population counts by cohort group. As mentioned in the Introduction, the Alaska Department of Labor publishes population data by age, race and sex in their *Population Overviews*. *Population Overviews 1986 and Provisional 1987 Estimates*, *Population Overviews 1988 and Provisional 1989 Estimates* and *Population Overviews 1999 Estimates* were used to calculate the denominator or the number of Native females by age group. The figures for the numerator, or the number of live births, came from special Indian Health Service Headquarters Reports titled Natality Report NSU-01. Service unit birth rates per 1,000 women in the age group are not published this year. Due to unknown migration factors between service units, populations based on the 1990 Census (especially by age and sex) cannot be accurately estimated. The 2000 Census populations are not yet available.